February 14, 2020 Project No.: 303277-003

Report No.: 20-2-62

Attention: Poul Hanson

Oxnard Union High School District

309 South K Street Oxnard, CA 93030

Project: Hueneme High School Home Bleachers

500 West Bard Road Oxnard, California

Subject: Supplemental Grading Recommendations for Areas Near Existing Structures
Reference: Earth Systems Pacific, February 11, 2020, Engineering Geology and Geotechnical

Engineering Report for Proposed Replacement Home Bleachers, Hueneme High

School,500 West Bard Road, Oxnard, California.

The referenced Engineering Geology and Geotechnical Engineering Report recommends overexcavation and recompaction that extends 5 feet outside the perimeter of the proposed replacement bleachers. There are apparently three existing structures that will not be replaced but would be within the overexcavation and recompaction zone. These structures include stadium light standards near the northwest corner of the bleachers and between Van Ness Street and the south end of the bleachers, and an electrical manhole that is also between the street and the bleachers. (It appears that the light standard to the northeast of the bleachers is more than 5 feet from the proposed bleacher footprint.)

Geotechnical information within the files of Earth Systems indicates that the existing light standard between Van Ness Street and the bleachers is supported by a cast-in-drilled-hole caisson. It is assumed that the northwest light standard is also supported by a caisson, and it is likely that the electrical manhole leads down into a concrete vault.

The bleacher foundations should be designed such that all new footings are more than 5 feet away from existing structures to prevent the new footing from adding a surcharge pressure on the existing structure. Such a modification to a standard design may require use of a grade beam or grade beams, as per the direction of the structural engineer.

Assuming that the existing light standard caissons are more than 5 feet from any edge of the nearest footings, the width of the grading in the immediate vicinities of the light standards (only) may be reduced to remain 3 feet outside of the existing caisson, even if that requires the recompaction zone to reach slightly under the outer limit of the bleacher footprint. The zone within 5 feet of the caisson should be recompacted quickly to restore lateral capacity of the upper zone of the caisson. It would be prudent to avoid doing the overexcavation for this work in windy conditions.

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The depth of the electrical vault is unknown. The recommended depth of the overexcavation is 5 feet below existing grade or 3.5 feet below the bottom of the foundation, whichever is deeper. The bottom of the overexcavation, where adjacent to the vault, should not extend any closer than where a 1:1 (horizontal to vertical) projection downward from the bottom of the nearest vault edge would intercept the overexcavation bottom. In other words, if the vault is 3 feet deep, a 1:1 projection downward to the overexcavation bottom would 2 feet outside the vault, and that would be how close the overexcavation should come toward the vault. If the vault is 4 feet deep, the projection would intercept the bottom at 1 foot outside the vault, and the overexcavation could come within 1 foot of the vault.

Please call if you have any questions, or if we can be of further service.

Respectfully submitted,

EARTH SYSTEMS PACIFIC

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Copies:

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1 - Project File